

UNITED STATES PATENT AND TRADEMARK OFFICE
CERTIFICATE OF CORRECTION

PATENT NO. : 7,173,281 B2
APPLICATION NO. : 10/692759
DATED : February 6, 2007
INVENTOR(S) : Yoshiharu Hirakata et al.

Page 1 of 3

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Claim 13, Column 31 lines 25-44 should read --A display device comprising:
a first substrate;
a plurality of pixels arranged in a matrix, each of which comprises a thin film transistor over the first substrate;
an interlayer insulating film over the thin film transistor;
a first alignment film over the interlayer insulating film;
a second substrate;
a plurality of spacers over the second substrate;
a second alignment film on the plurality of spacers and over the second substrate; and
a liquid crystal material interposed between the first alignment film and the second alignment film;
wherein each of the plurality of spacers has a first end, a second end between the first end and the second substrate, and a center portion between the first end and the second end,
wherein a width of the second end is larger than a width of the center portion,
wherein a taper portion is formed at the second end, and
wherein a height of the spacer is 0.5 μ m to ~~110~~ 10 μ m.--

Claim 45, Column 34 lines 6-29 should read --A display device comprising:
a first substrate;
a plurality of pixels arranged in a matrix, each of which comprises a thin film transistor over the first substrate;
an interlayer insulating film over the thin film transistor;
a first alignment film over the interlayer insulating film;
a second substrate;
a conductive film over the substrate;
a plurality of spacers on the conductive film;
a second alignment film on the plurality of spacers and on the conductive film; and
a liquid crystal material interposed between the first alignment film and the second alignment film;
wherein each of the plurality of spacers has a first end, a second end between the first end and the second substrate,
wherein a contact surface between the second alignment film and the spacer is continuously connected to a contact surface between the second alignment film and the conductive film,
wherein a taper portion is formed at the second end, and
wherein a height of the spacer is 0.5 μ m to ~~110~~ 10 μ m.--

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Claim 77, Column 36 line 60 - Column 37, line 14 should read --A display device comprising:
a first substrate;
a plurality of pixels arranged in a matrix, each of which comprises a thin film transistor over the first substrate;
an interlayer insulating film over the thin film transistor;
a first alignment film over the interlayer insulating film;
a second substrate;
a plurality of spacers over the second substrate;
a second alignment film on the plurality of spacers and over the second substrate;
a liquid crystal material interposed between the first alignment film and the second alignment film;
wherein each of the plurality of spacers has a first end, a second end between the first end and the second substrate, a center portion between the first end and the second end, and a lower portion between the center portion and the second end,
wherein an angle between a tangent plane at a center portion and a surface of the second substrate is larger than an angle between a tangent plane at a lower portion and the surface of the second substrate, and
wherein a height of the spacer is 0.5 μ m to ~~110~~ 10 μ m.--

Claim 107, Column 39 lines 47-65 should read --A display device comprising:
a first substrate;
a plurality of pixels arranged in a matrix, each of which comprises a thin film transistor over the first substrate;
an interlayer insulating film over the thin film transistor;
a first alignment film over the interlayer insulating film;
a second substrate;
a plurality of spacers over the second substrate;
a second alignment film on the plurality of spacers and over the second substrate; and
a liquid crystal material interposed between the first alignment film and the second alignment film;
wherein each of the plurality of spacers has a first end, a second end between the first end and the second substrate, and a center portion between the first end and the second end,
wherein a width of the second end L_2 and a width of the center portion L_1 are set in the range of $1 < L_2 / L_1 < 2.5$, and

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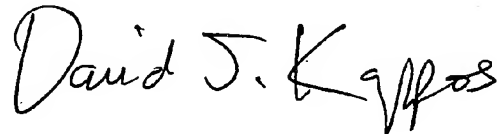
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wherein a height of the spacer is 0.5 μ m to ~~110~~ 10 μ m.--

Signed and Sealed this

Twenty-fifth Day of August, 2009

A handwritten signature in black ink, reading "David J. Kappos". The signature is written in a cursive, flowing style.

David J. Kappos
Director of the United States Patent and Trademark Office